

**Status of *Platycephalus cantori* Bleeker, 1879
(Teleostei: Platycephalidae)**

Leslie W. Knapp and Hisashi Imamura

(LWK) Department of Vertebrate Zoology, National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.; (HI) Hachinohe Branch, Tohoku National Fisheries Research Institute, 25–259 Same, Hachinohe, Aomori 031, Japan

Abstract.—*Platycephalus cantori* Bleeker, 1879, *P. maculosus* Peters, 1869 and *P. bobbosok* Bleeker, 1853 are here regarded as junior synonyms of *P. carbunculus* Valenciennes in Cuvier & Valenciennes, 1833. Lectotypes are selected for *P. cantori* and *P. maculosus*.

With a brief description based on a specimen from Bombay, Valenciennes in Cuvier & Valenciennes (1833) described *Platycephalus carbunculus* (currently *Eurycephalus carbunculus* according to Imamura, 1996). Cantor (1849) identified specimens from Pinang as *Platycephalus carbunculus* and gave a more extensive description. Günther (1860) erroneously listed dried skins from Dr. Cantor's collection as types of *P. carbunculus* and synonymized *P. carbunculus* under *P. malabaricus* Cuvier, 1829. Bleeker (1879) insisted that Cantor's *P. carbunculus* was not *P. carbunculus* Va-

Table 1.—Counts and proportional measurements of holotype of *Eurycephalus carbunculus* and syntypes of *Platycephalus cantori*.

	<i>E. carbunculus</i> (Holotype)	<i>Platycephalus cantori</i> (Syntypes)	
Standard length (SL) mm	128.4	133.6	135.4
Head length (HL)	43.1	44.3	43.2
Counts			
Dorsal-fin rays	I-VIII-11	I-VIII-11	I-VII-?
Anal-fin rays	12	12	12
Pectoral-fin rays	19	19	19
Pelvic-fin rays	I, 5	I, 5	I, 5
Lateral line scales	54	53	53
Proportions as % SL			
Head length	33.6	33.2	31.9
Snout length	8.8	9.0	8.1
Orbital diameter	8.6	9.4	8.3
Interorbital width	1.9	1.7	?
Length of caudal peduncle	8.8	9.2	8.9
Depth of caudal peduncle	4.4	4.1	4.5
Pectoral-fin length	15.1	15.4	?
Proportions as % HL			
Snout length	26.2	27.1	25.5
Orbital diameter	25.5	28.2	25.9
Interorbital width	5.8	5.2	?
Upper jaw length	34.1	35.9	34.5
Lower jaw length	50.3	53.0	53.9

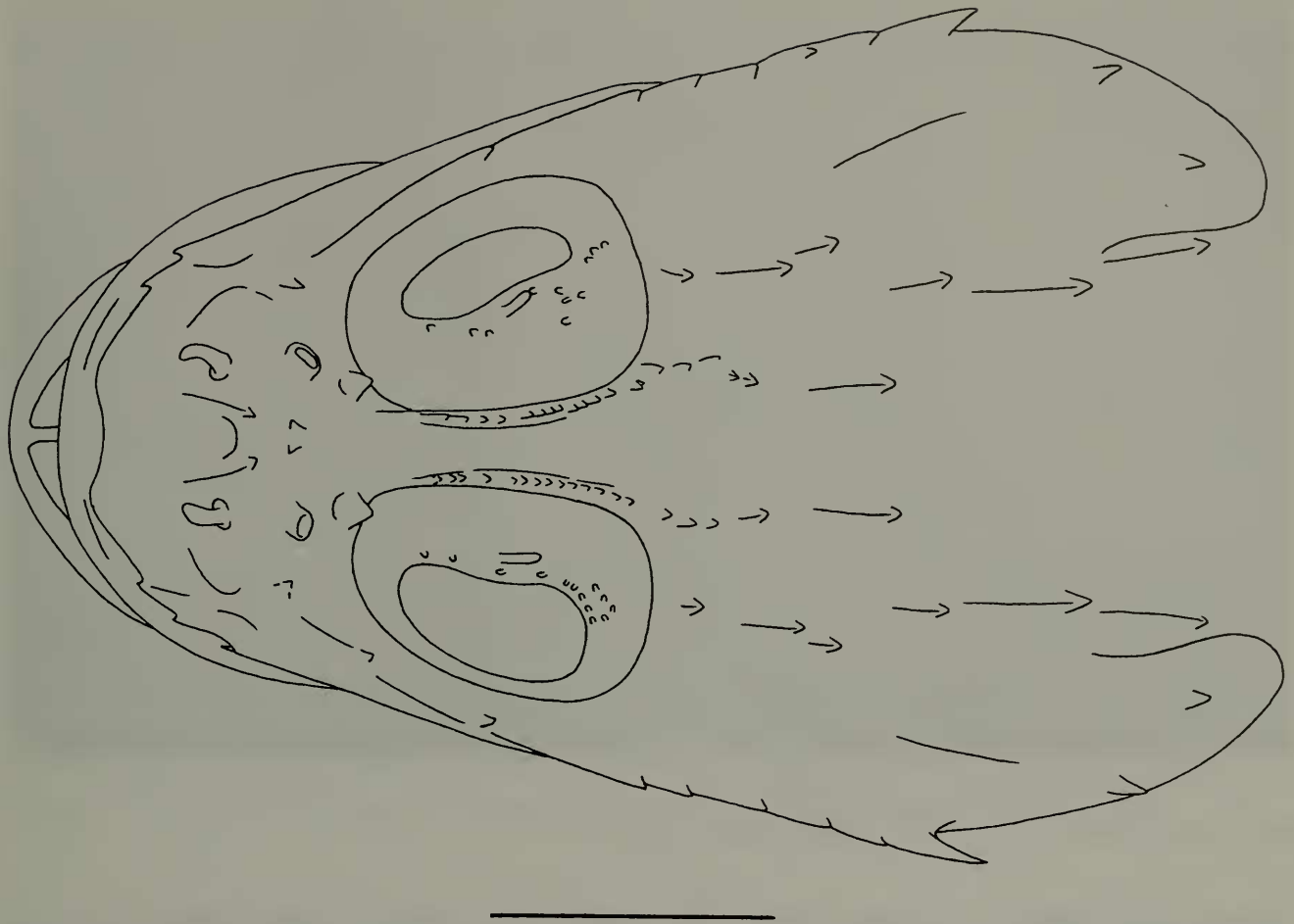


Fig. 1. Dorsal view of head of holotype of *Eurycephalus carbunculus*, MNHN 6875. Scale bar indicates 10 mm.

lenciennes and renamed it *P. cantori*. After examining the primary type specimens of *P. carbunculus* and *P. cantori*, de Beaufort & Briggs (1962) followed Bleeker in recognizing the two species. Murty (1982) listed *Thysanophrys cantori* but noted the lack of authentic records from India. We believe de Beaufort and Briggs were incorrect and we regard *P. cantori* Bleeker, 1879, *P. bobossok* Bleeker, 1860 and *P. maculosus* Peters, 1869 as junior synonyms of *P. carbunculus* Valenciennes in Cuvier & Valenciennes, 1833.

Counts and measurements follow Hubbs & Lagler (1958). Institutional abbreviations are taken from Leviton et al. (1985).

A characteristic series of pimple-like protuberances on the upper margin of the eye (Fig. 1), with one elongated as a simple tentacle, is present in the holotype of *Eurycephalus carbunculus* (MNHN 6875). This series is also readily visible in the putative

types *P. bobossok* (RMNH 5919) and the syntypes of *P. maculosus* (ZMB 5145) but, unfortunately, cannot be seen on the dried skins (syntypes) of *P. cantori* (BMNH 1860.3.19.268–9). However, the mottled coloration on the back and sides of the body (Fig. 2), short snout, lack of any interopercular flaps, presence of a preorbital spine, supraorbital ridge well-serrated above the eye, and three or more suborbital spines confirm that the putative syntypes of *P. cantori* are identifiable as *E. carbunculus*. The same combination of characters is evident in the type specimens of *P. bobossok* and *P. maculosus*. A comparison of counts and proportional measurements of the holotype of *E. carbunculus* and the syntypes of *P. cantori* appears in Table 1. The close agreement in proportional measurements and the combination of 11 dorsal soft rays, 12 anal-fin rays, 19 pectoral-fin rays and a

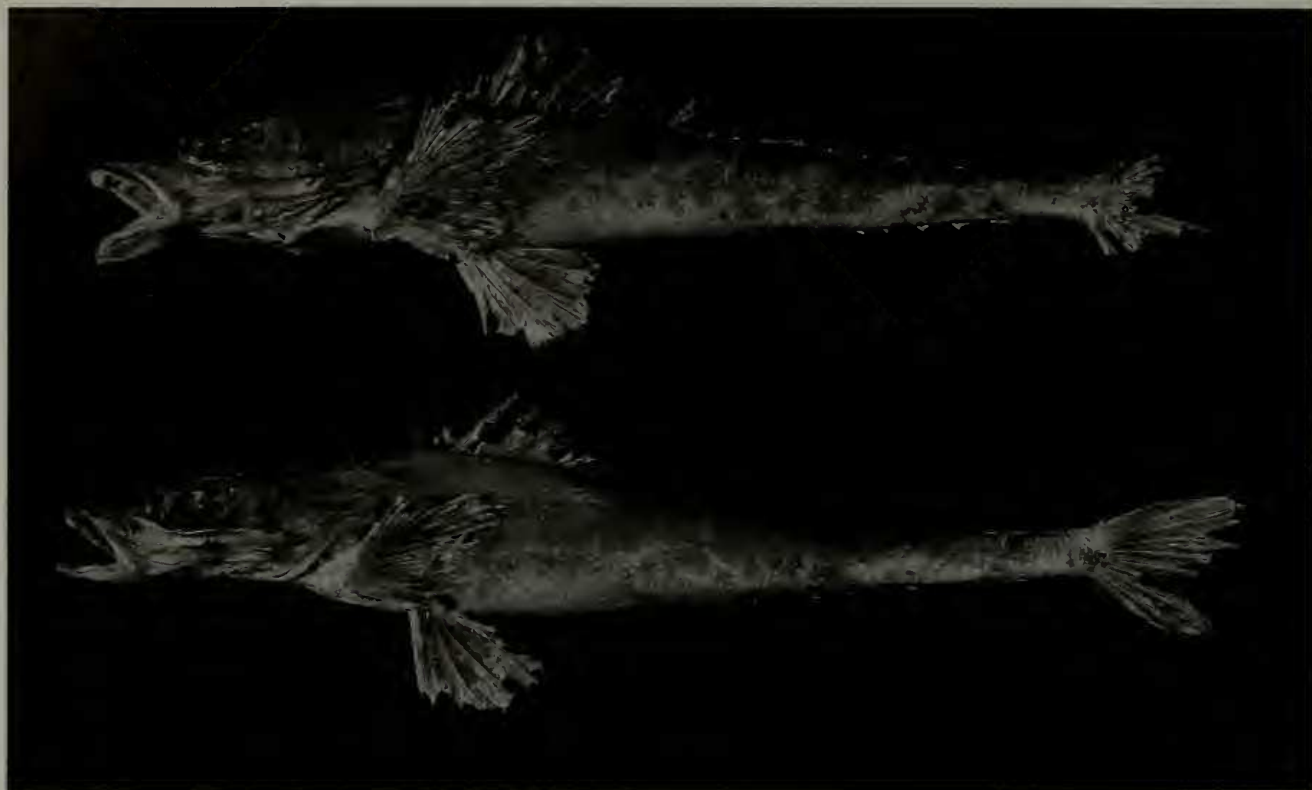


Fig. 2. Lateral view of lectotype of *Platycephalus cantori* (upper, 133.6 mm SL) BMNH 1860.3.19.268 and paralectotype (lower, 135.4 mm SL) BMNH 1860.3.19.269.

pelvic-fin ray count of 1,5 are further evidence of their strong similarity.

It seems appropriate here to designate lectotypes for *Platycephalus cantori* Bleeker and *P. maculosus* Peters. We select BMNH 1860.3.19.268 (134 mm SL, caudal fin largely broken, interorbital space entire) as the lectotype and BMNH 1860.3.19.269 (135 mm SL, caudal fin mostly complete, interorbital space truncated) as the paralectotype of *P. cantori*. ZMB 5145 (93 mm SL) is selected as the lectotype of *P. maculosus* Peters and ZMB 32760 (129 mm) as a paralectotype. As Peters (1869), in a footnote, compared several features of the above two specimens from Singapore with ZMB 724 (1, 103 mm) from the Celebes, we regard the latter to be part of the type series and, is here designated as a second paralectotype. Bleeker (1853:461) described *Platycephalus bobossok* from a single specimen (148 mm in length) from Batavia. In his later revision of *Platycephalus*, Bleeker (1879:24) listed 4 specimens of *P. bobossok* (118–180 mm in length) from Batavia and other localities. Three specimens

(143, 146, 156 mm total length) are currently found in the type collection (RMNH 5919). Of these, the specimen 146 mm in total length most closely approximates Bleeker's holotype.

Acknowledgments

The authors gratefully acknowledge assistance in recataloging lectotypes received from Hans-J. Paepke (ZMB) and Oliver Crimmen and Anne-Marie Woolger (BMNH).

Literature Cited

- Bleeker, P. 1853. Diagnostische beschrijvingen van nieuwe of weinig bekende vissoorten van Batavia. Tiental I–VI.—*Natuurkundig Tijdschrift voor Nederlandsche Indie* IV:451–516.
- . 1879. Revision des especes insulindiennes du genre *Platycephalus*.—*Natuurkundige Verhandelingen Koninklijke Akademie*, v. XIX (1878): 1–31.
- Cantor, T. 1849. Catalogue of Malayan Fishes.—*Journal of the Asiatic Society of Bengal* 18(2):981–1443.
- Cuvier, G., & A. Valenciennes. 1829. *Histoire natu-*

- relle des poissons. F. G. Levrault, Paris, vol. 4, 518 pp.
- , & ———. 1833. Histoire Naturelle des Poissons. F. G. Levrault, Paris, v. 9:429–512.
- de Beaufort, L. F., & J. C. Briggs. 1962. The fishes of the Indo-Australian Archipelago. XI. Scleroparei, Hypostomides, Pediculati, Plectognathi, Opisthomi, Discocephali, Xenoterygii. E. J. Brill, Leiden, 1–481.
- Günther, A. 1860. Catalogue of the Acanthopterygian fishes in the collection of the British Museum. 2. Squamipinnes, Cirrhitidae, Triglidae, Trachinidae, Polynemidae, Sphraenidae, Trichiuridae, Scombridae, Carangidae, Xiphiidae. London, xxi + 548 pp.
- Hubbs, C. L., & K. F. Lagler. 1958. Fishes of the Great Lakes Region.—Cranbrook Institute of Science Bulletin 26:213 pp.
- Imamura, Hisashi. 1966. Phylogeny of the Family Platycephalidae and Related Taxa (Pisces: Scorpaeniformes).—Species Diversity 1(2):123–233.
- Leviton, A. E. et al. 1985. Standards in herpetology and ichthyology: Part I. Standard symbolic codes for institutional resource collections in herpetology and ichthyology.—Copeia 1985(3): 802–832.
- Murty, V. S. 1982. On the fishes of the family Platycephalidae of the seas around India.—Journal of the Marine Biological Association of India (1975) 17(3):679–694.
- Peters, W. (C.H.). 1869. Über die von Hrn. Dr. F. Jägor in dem ostindischen Archipel gesammelten und dem Königl. Zoologischen Museum übergebenen Fische.—Monatsberichte der Königlich-Preussische Akademie der Wissenschaften zu Berlin for 1868:254–281.